UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

52349

7590

04/30/2009

WENDEROTH, LIND & PONACK L.L.P. 1030 15th Street, N.W. Suite 400 East Washington, DC 20005-1503

EXAMINER

CHAWAN, VIJAY B

ART UNIT PAPER NUMBER

2626

DATE MAILED: 04/30/2009

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
•	10/587.241	07/26/2006	Natsuki Saito	2006 1146A	9702

TITLE OF INVENTION: VOICE SYNTHESIS DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	07/30/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS; This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ap in m

appropriate. All further indicated unless correct maintenance fee notifica	correspondence includir ed below or directed otl	ng the Patent, advance of herwise in Block 1, by (	orders and notification of rational specifying a new corres	naintenance fees wi pondence address;	Ill be mailed to the current and/or (b) indicating a separate	correspondence address as arate "FEE ADDRESS" for	
		lock 1 for any change of address)	Feet	(c) Transmittal This	nailing can only be used for certificate cannot be used for paper, such as an assignmen of mailing or transmission.	or any other accompanying	
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1030 15th Street Suite 400 East		ACK L.L.P.	I he Stat addi tran	reby certify that this	s Fee(s) Transmittal is being th sufficient postage for fir Stop ISSUE FEE address O (571) 273-2885, on the d	g deposited with the United	
Washington, DC 20005-1503						(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/587,241	07/26/2006	•	Natsuki Saito		2006_1146A	9702	
TITLE OF INVENTION	I: VOICE SYNTHESIS I	DEVICE					
	Г	Ι	T	ı			
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE			
nonprovisional	NO	\$1510 •	\$300	<b>\$</b> 0	\$1810	07/30/2009	
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	J			
	I, VIJAY B	2626	704-268000				
1. Change of correspond CFR 1.363).		,	2. For printing on the patent front page, list  (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  (2) the name of a single firm (having as a member a 2				
Change of corresp Address form PTO/SI	oondence address (or Cha B/122) attached.	ange of Correspondence					
"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print or typ	pe)			
PLEASE NOTE: Un	less an assignee is ident	ified below, no assignee	data will appear on the part of the part o	atent. If an assigne	e is identified below, the d	ocument has been filed for	
(A) NAME OF ASSI	•	piction of this form is ivo	(B) RESIDENCE: (CITY	· ·	OUNTRY)		
, ,					,		
Please check the appropr	riate assignee category or	categories (will not be p	rinted on the patent): $\Box$	Individual 🖵 Cor	poration or other private gro	oup entity 🖵 Government	
4a. The following fee(s)	are submitted.		b Daymant of Eag(s): (Dless	see first reapply on	y previously paid issue fee	shown above)	
Issue Fee	are submitted.	7	A check is enclosed.	ise msi reappiy an	y previously paid issue fee	snown above)	
*	No small entity discount p		Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
Advance Order -	# of Copies		The Director is hereby overpayment, to Depo	authorized to charg sit Account Number	ge the required fee(s), any de r(enclose a	eficiency, or credit any n extra copy of this form).	
5. Change in Entity Sta	*	*					
• •	ns SMALL ENTITY state				L ENTITY status. See 37 Ctered attorney or agent; or the		
interest as shown by the	records of the United Sta	ittes Patent and Trademark	conflice.	ne applicant; a regis	tered attorney or agent; or tr	le assignee of other party in	
Authorized Signature				Date			
Typed or printed name				Registration No	)		
This collection of inform an application. Confiden	nation is required by 37 C	CFR 1.311. The informatic U.S.C. 122 and 37 CFR	on is required to obtain or r	etain a benefit by th	e public which is to file (and inutes to complete, including	d by the USPTO to process) ng gathering, preparing, and	
submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	/irginia 22313-1450. DC	e USPTO. Time will vary rden, should be sent to th D NOT SEND FEES OR	y depending upon the indivine Chief Information Office COMPLETED FORMS TO	rigual case. Any corer, U.S. Patent and To THIS ADDRESS.	inutes to complete, includir nments on the amount of ti Trademark Office, U.S. Dep SEND TO: Commissioner	artment of Commerce, P.O. for Patents, P.O. Box 1450,	

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/587,241	07/26/2006	Natsuki Saito	2006_1146A	9702	
52349 7590 04/30/2009			EXAMINER		
WENDEROTH,	LIND & PONACK I	CHAWAN	, VIJAY B		
1030 15th Street, N.W.			ART UNIT	PAPER NUMBER	
Suite 400 East			•		

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 582 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 582 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)			
	10/587,241	SAITO ET AL.			
Notice of Allowability	Examiner	Art Unit			
	Viiov P. Chowen	2626			
	Vijay B. Chawan	2626			
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED or other appropriate comr <b>IGHTS</b> . This application is	in this application. If not include nunication will be mailed in due	ed course. <b>THIS</b>		
1. 🔀 This communication is responsive to Applicant's correspon	ndence filed 7/26/06.				
2. The allowed claim(s) is/are <u>19-27</u> .					
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority upon a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> </ul>	.,,	) or (f).			
<ol><li>Certified copies of the priority documents have</li></ol>	• •	<del></del>			
<ol><li>Copies of the certified copies of the priority do</li></ol>	cuments have been receiv	ed in this national stage applica	tion from the		
International Bureau (PCT Rule 17.2(a)).					
* Certified copies not received:					
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		le a reply complying with the red	quirements		
4. A SUBSTITUTE OATH OR DECLARATION must be subminFORMAL PATENT APPLICATION (PTO-152) which give			IOTICE OF		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.					
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached					
1)  hereto or 2)  to Paper No./Mail Date					
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date					
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).					
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.					
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. ☐ Notice of	Informal Patent Application			
2. $\square$ Notice of Draftperson's Patent Drawing Review (PTO-948)		Summary (PTO-413),			
3. ☑ Information Disclosure Statements (PTO/SB/08),	Paper No 7.	o./Mail Date 's Amendment/Comment			
Paper No./Mail Date  4.  Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner	's Statement of Reasons for Allo	owance		
of Biological Material	9. 🗌 Other	·			
/Vijay B. Chawan/					
Primary Examiner, Art Unit 2626					

Application/Control Number: 10/587,241 Page 2

Art Unit: 2626

### **DETAILED ACTION**

### Allowable Subject Matter

- 1. This office action is in response to the correspondence filed 3/26/06.
- 2. Claims 1-18 were cancelled, and claims 19-27 were added by the preliminary amendment filed 3/26/06.
- 3. Claims 19-27 are allowed.
- 4. The following is an examiner's statement of reasons for allowance: Applicant's teach a voice synthesis device, comprising: a memory unit operable to store, in advance for each voice quality, voice element information regarding a plurality of voice elements having the plural voice qualities that are different from each other; a voice information generating unit operable to acquire text data, and to generate, from plural pieces of the voice element information stored in said memory unit, synthetic voice information for each of the voice qualities, the synthetic voice information indicating synthetic voice having the voice quality which corresponds to a character that is included in the text data; a designating unit operable to place fixed points at Nth dimensional coordinates for display where N is a natural number, the fixed points indicating voice quality of each piece of the voice element information stored in said memory unit, and to place plural set points at the coordinates for display on the basis of operation by a user so as to derive and designate a ratio at which changes each of plural pieces of the synthetic voice information which contributes to morphing along a time sequence on the basis of the placement of a moving point and the fixed points, the moving point continuously

Art Unit: 2626

moving between the plural set points along the time sequence; a morphing unit operable to generate intermediate synthetic voice information using each of the plural pieces of synthetic voice information generated by said voice information generating unit with the ratio of change along the time sequence designated by said designating unit, the intermediate synthetic voice information indicating synthetic voice having intermediate voice quality, between the plural voice qualities, which corresponds to a character that is included in the text data; and a voice outputting unit operable to convert, to synthetic voice having the intermediate voice quality, the intermediate synthetic voice information generated by said morphing unit, and to output the resulting synthetic voice, wherein said voice information generating unit is operable to generate each of the plural pieces of synthetic voice information as a sequence of each of plural characteristic parameters, and said morphing unit is operable to generate the intermediate synthetic voice information by calculating an intermediate value of the plural characteristic parameters to which the plural pieces of synthetic voice information respectively correspond. The cited prior art alone or in combination fails to fairly teach or disclose the claimed combination of features.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2626

#### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see attached form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vijay B. Chawan whose telephone number is (571) 272-7601. The examiner can normally be reached on Monday Through Friday 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Vijay B. Chawan/ Primary Examiner, Art Unit 2626

vbc 4/29/09